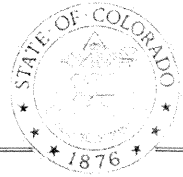


# State of Colorado



Bill Ritter, Jr.  
*Governor*

Rich Gonzales  
*Executive Director*

David M. Kaye  
*Division Director*

## DPA

Department of Personnel  
& Administration

Division of Human Resources  
1313 Sherman St., First Floor  
Denver, Colorado 80203  
Phone (303) 866-2323  
Fax (303) 866-2021  
[www.colorado.gov/dpa](http://www.colorado.gov/dpa)

DATE: July 30, 2008

TO: Appointing Authorities through HR Directors  
American Federation of State, County, Municipal Employees  
Colorado Association of Public Employees  
Colorado Public Employees Alliance  
Association of Colorado State Patrol Professionals  
Teamsters 435

FROM: David M. Kaye, Division Director

CC: Rich Gonzales, Executive Director

SUBJECT: Implementation of System Changes, JEL 09-01

The system changes indicated on the accompanying chart are approved for implementation. The effective date for each change is indicated on the attached "Summary of System Changes" chart. If the changes involve class descriptions and/or class placements, they are also included. Please provide this information to appointing authorities, directly affected employees, and any others in your agency who may need this information. Information is also available on the web at <http://www.colorado.gov/dpa/dhr>.

If you have any questions, please contact Compensation Unit staff at 303-866-2455.

## SUMMARY OF SYSTEM CHANGES

JE Letter #: 09-01  
Date of Letter: 7/30/08

### Total Compensation Systems

\* P = proposed; F = final (only F is to be entered into CPPS and ADS)

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		H6G3XX	General Professional III	H6G3XX	General Professional III	PS	nc	H37	nc	0	nc	7/30/08
F		X		H6G4XX	General Professional IV	H6G4XX	General Professional IV	PS	nc	H45	nc	0	nc	7/30/08
F		X		H6G5XX	General Professional V	H6G5XX	General Professional V	PS	nc	H51	nc	0	nc	7/30/08

**The Summary only refers to the Life/Social Science Research Positions within the General Professional class series.**

ISSUING AUTHORITY: Colorado Department of Personnel and Administration Rev. 01/2002. # is designation for a salary lid class.



# **SYSTEM MAINTENANCE STUDY**

## **NARRATIVE REPORT – FINAL CHANGES**

**Researcher  
(Wildlife Biology/Ecology and Health/Social Science)**

**Class Code H6G3XX through H6G5XX**

**Conducted Fiscal Year 2007-2008**

### **BACKGROUND AND PURPOSE OF STUDY**

This system-wide study is part of the Department of Personnel and Administration's (hereafter "the department") statutory responsibility, C.R.S. 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by C.R.S. 24-50-104(1)(a). The state personnel director has delegated authority for system studies to the Division of Human Resources (hereafter "the division").

On September 1, 1993, the Life/Social Science Researcher/Scientist class was created by system maintenance study and consolidated the Researcher and the Wildlife Researcher classes. On September 1, 1998, the Life/Social Science Researcher/Scientist class was consolidated into the General Professional class series as part of the Professional Services occupational group consolidation study.

This study is being conducted to address concerns relayed by the Department of Natural Resources, Division of Wildlife (DNR/DOW), to examine if the General Professional class series adequately

reflects the current wildlife researcher positions and compensation levels, and if they are competitive with the market for the recruitment and retention of qualified wildlife researchers.

## **METHODOLOGY**

Based on the identified need for the study, the division convened a study team. Criteria for selecting study team members included departments having positions in the occupations being studied; being well-versed in the job evaluation system's principles, structure, and factors; having the ability to think conceptually and creatively; possessing the ability to devote the necessary time and effort required; and being able to take an active role in explaining the study and its outcomes.

In keeping with the normal process for conducting system maintenance studies (as documented in the "Technical Assistance-System Maintenance Study Process" established by the division and published on the DPA/DHR Web site), the division assembled a study team composed of representatives from the departments of Natural Resources, including the Division of Wildlife, and Public Health and Environment. These study team members represented the departments with the researcher (wildlife biology/ecology and health/social science) positions within the state system.

## **INITIAL ANALYSIS**

This study was announced September 12, 2007, and the first study team meeting held September 20, 2007, to provide an overview of the study process, objectives and study plan. The objectives were to address concerns identified, including whether the General Professional class series adequately reflects the work performed, key skill sets required, and if the current compensation levels are competitive with the market for the recruitment and retention of qualified researchers.

As there is a lack of available market data through third-party survey sources used in the annual compensation survey process, the option of conducting a direct survey was discussed, along with possible survey questions and benchmark job descriptions that would be included in the direct survey. The potential labor market to survey was reviewed to gain consensus and to define what organizations and employers the State compares to for recruitment and retention of researchers. The study team determined that a direct survey was needed in order to collect appropriate market data.

The study team developed the direct survey tool and a meet and confer session was held March 19, 2008, to finalize the direct survey tool and collect input from any interested employees and employee organizations regarding the selection of survey sources related to this system maintenance study. As part of the meet and confer process, the survey tool was also sent to the Total Compensation Advisory Council for input; no comments were received.

Other issues were also relayed to the division at the meet and confer. There was concern that the General Professional series does not adequately describe the essential requirements for researchers to meet their job expectations. It was noted that wildlife researchers are typically hired with at least a Master's degree, and that the General Professional series does not require applicants to have at least a Master's degree. The survey tool collected data for two types of researchers, the wildlife biology/ecology researchers and health/social science researchers. The direct survey was also

designed to collect data for supervisory positions in those two areas. These researcher positions are not the same as positions in the Physical Science Researcher/ Scientist class, in that these positions do not practice research in the physical sciences, such as geology, chemistry, hydrology, etc.

Higher education researcher and faculty positions were not included in the direct survey because they are not similar in scope and nature of work to the identified researcher positions in the state job evaluation system. It was discussed at the meet and confer meeting on March 19, 2008, that higher education and faculty positions should not be surveyed. Even though higher education faculty and researcher positions require advanced degrees, this does not mean that those positions are equivalent to researchers in the state job evaluation system in terms of nature and purpose of work. In addition, the division does not use salary data from another segment of the executive branch of government, e.g., tenure employment system with very different mission, for salary comparison purposes, as these entities are considered part of one single employer.

The direct salary survey was sent by the division to all other state governments on April 15, 2008. A total of 15 states reported matches and provided salary data to this initial analysis. A geographical assessor calculated the salary survey data to determine the cost of living index for each state reporting. Salary structure data was also collected from the federal government, with a total of 24 job matches made to the direct survey benchmarks, and used the salary ranges stated in the Colorado location federal compensation plan. To ensure proper matches to the direct survey benchmarks, the division collected class descriptions and verified matches with each survey participant, including the Federal government matches.

DNR/DOW provided the division with the *2006 Compensation of Life Scientists in the United States of America* salary survey, published by Abbott, Langer & Associates, Inc. The survey was sponsored by *The Scientist*, the American Society for Biochemistry and Molecular Biology, and the American Institute of Biological Sciences. The division conducted a review of this published survey to ensure compliance with professional compensation standards and the State's criteria, and found that the survey was an acceptable third-party survey. Colorado market survey data from this survey was included with the direct salary survey data.

The *2006 Compensation of Life Scientists* survey that was provided by DNR/DOW did not provide salary ranges, thus the division calculated and focused on the competitive and comparable Colorado market, by using the midpoint and mean salary data provided in the survey. The *2006 Compensation of Life Scientists* salary survey data was projected based on the Employment Cost Index (ECI), provided by the US Department of Labor, Bureau of Labor Statistics, in order to be comparable with current state salaries.

## **ISSUES AND INITIAL FINDINGS**

Upon collection and analysis of the direct salary survey and the *2006 Compensation of Life Scientists* survey, the study team discussed and evaluated the issues identified in the study.

**Issue #1:** Whether the General Professional class series is adequate for wildlife researcher positions. The issue is that researchers are expected to develop, test, and apply new models, theories and

methodologies in wildlife science in order to advance the basic knowledge in their field of science. The expressed concern by DOW is that duties performed by wildlife researchers, and the minimum qualifications, knowledge and skills necessary to perform those duties, may not be consistent with nor adequately described by the General Professional series.

**Findings:** The nature of the wildlife researcher's work is consistent with the General Professional series. The wildlife researchers use the "scientific method" in the wildlife biology field to conduct research that is analytical and evaluative in nature, and where decisions require the creative and conceptual application of theory and principles to the professional field of research methodology within the biological field. The General Professional class series accurately describes and provides adequate structure to the wildlife researcher positions. Classes are a broad description of the general nature, functioning level, and common characteristics of similar jobs, not a detailed description of individual jobs or clusters of jobs. The General Professional class series describes assignments in professions requiring knowledge and application of theory, models, and concepts of a profession, research and analysis, and creativity. The General Professional series accurately describes the wildlife researcher.

It is common practice by DNR/DOW to require advanced degrees for wildlife researchers hired into their positions, such as at least a Master's degree, so that the individuals have the knowledge, skills and abilities to conduct research. The selection system allows for qualified human resource professionals to modify minimum qualifications, upon approval from the division, to meet the necessary education and experience requirements for successful performance of the job duties of a position. This study, like other system maintenance studies, does not make a judgment on the use of minimum qualifications, and whether modifications are bona fide. Job evaluation is based on the predefined job-related factors regardless of any occupant's characteristics used in the selection process.

**Issue # 2:** Whether current pay grades are inappropriate (too low) for researcher positions. There is concern the General Professional pay ranges are not competitive with market salaries for scientists/researchers with similar job descriptions, skill sets and education, and that the alleged disparity in the market and state pay ranges has resulted in recruitment and retention difficulties.

**Initial Findings:** The market survey data, collected through the direct salary survey, and the 2006 *Compensation of Life Scientists* salary survey, demonstrated that the State of Colorado researcher positions are adequately compensated in comparison to similar positions in the surveyed market. The data reflects that the market researchers and researcher supervisors are comparable to our General Professional III (fully operational) and General Professional V (supervisor) classes, respectively. The direct survey also confirmed that these types of researchers are classified and compensated differently than Physical Science Researchers. The table below reflects the results from the initial survey published in the proposed JEL. Please see the table on page 6 for updated and final survey data for the wildlife biology/ecology researcher.

<b><u>Wildlife Biology/Ecology Researcher</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
Market Average	\$4,732	\$4,199
Colorado - General Professional III	\$4,552	\$5,270

<b><i>Difference</i></b>	<b><i>-3.80%</i></b>	<b><i>25.50%</i></b>
<b><u>Wildlife Biology/Ecology Researcher Supervisor</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
Market Average	\$5,152	\$4,558
Colorado - General Professional V	\$6,405	\$7,130
<b><i>Difference</i></b>	<b><i>26.20%</i></b>	<b><i>56.40%</i></b>
<b><u>Health/Social or other Life Science Researcher</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
Market Average	\$4,874	\$3,678
Colorado - General Professional III	\$4,552	N/A
<b><i>Difference</i></b>	<b><i>-6.60%</i></b>	<b><i>N/A</i></b>
<b><u>Health/Social or other Life Science Researcher Supervisor</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
Market Average	\$5,772	\$4,832
Colorado - General Professional V	\$6,405	N/A
<b><i>Difference</i></b>	<b><i>10.97%</i></b>	<b><i>N/A</i></b>

The initial data analysis demonstrated that the state's fully operational researchers have midpoints that are slightly lower than the market, but the variance is within tolerance. Further, the average salaries for the wildlife biology/ecology researcher levels are significantly higher than the market. The midpoints for the supervisory levels are also higher than the market.

Upon collection and review of the turnover data for the wildlife researcher positions, it was determined that the overall 3-year average is an 11% turnover rate, which is in line with the overall average 3-year turnover rate of 10.1% for the entire Professional Services occupational group.

## **MEET AND CONFER ON PROPOSED RESULTS**

C.R.S. 24-50-104(1)(b) requires the department to meet and confer with affected employees and employee organizations, if requested, regarding the proposed changes before they are implemented as final. In an effort to proactively facilitate this process, a public meeting was scheduled for July 2, 2008. All comments related to these proposed changes needed to be received by the division no later than close of business on July 7, 2008.

## **MEET AND CONFER SUMMARY AND ADDITIONAL DATA ANALYSIS**

Twelve attendees from the Department of Natural Resources were present for the meet and confer; 10 of which were from the Division of Wildlife. A letter was also submitted on July 7, 2008, by the Director for the Division of Wildlife, Department of Natural Resources.

Disagreement was expressed with some of the matches from other states related to the nature of the work and education required to be a researcher. DOW requested the division contact each responding state to verify whether their wildlife biology positions conducted research, with at least 90% of the time devoted to conducting new scientific research. Based on this input from DOW, the division once again verified matches, removed those that did not conduct research 90% of the time, and also included new states in the survey. It was discovered that all of the state matches were

conducting research activities, but usually around 20% of the time, with the remainder of their time conducting other wildlife biology program/project administration. The majority of other state departments' contract out their research functions in the wildlife biology field, and around 10 states in the nation conduct their own wildlife research to support their state wildlife programs. These other states were identified by DOW as Alaska, California, Idaho, Michigan, Minnesota, Missouri, Oregon, Washington, and Wisconsin. These states also require their applicants to hold at least a Master's degree upon entry into a position. Oregon did not match to the wildlife biology/ecology researchers, since that state does not have a natural resources department, thus Oregon data was not used in the final analysis.

The division collected and verified the wildlife researcher job matches, minimum qualifications, and survey data of the identified states. The new data analysis includes the federal government and the other wildlife researcher matched state data and the *2006 Compensation of Life Scientists* salary survey.

The salary survey job capsules were created at the General Professional IV level, since the majority of the state's research positions are allocated at the General Professional IV level, based on staff authority within a research specialty area and are considered to be the fully operational level by the departments. It was also requested, in DOW's letter, for the division to include wildlife management biologist positions with the survey job capsule. The division did not survey the wildlife management level, because surveying the fully-operational and supervisor levels provides sufficient salary survey data analysis capability, to determine if the researchers are in alignment with the market. The table below reflects the updated and final analysis.

<b><u>Wildlife Biology/Ecology Researcher</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
New Market Average	\$4,885	\$4,630
General Professional III	\$4,552	N/A
<b><i>Difference</i></b>	<b>-6.81%</b>	
Colorado - General Professional IV	\$5,533	\$5,270
<b><i>Difference</i></b>	<b>11.71%</b>	<b>12.14%</b>
<b><u>Wildlife Biology/Ecology Researcher Supervisor</u></b>	<b><u>Midpoint</u></b>	<b><u>Weighted Average Salary</u></b>
New Market Average	\$5,737	\$5,512
Colorado - General Professional V	\$6,405	\$7,130
<b><i>Difference</i></b>	<b>10.43%</b>	<b>22.69%</b>

Meet and confer questions and comments.

- "Aren't we only using new hire salary since we use ranges?" The division uses salary range midpoints for data analysis and to set pay grades. Midpoint values are used since they are much more stable than actual salary. The range midpoint also represents the market rate for a fully competent employee, regardless of pay variances within the structure width minimum or maximum



values. In addition, actual salary is another data point that is considered, but not directly used to set pay grades, due to the variances in employer's ranges and pay practices.

- **“Why were federal data points used as a single point vs. the individual states that responded? There are multiple federal agencies that have wildlife biological researchers and they should all be counted as separate entities and data points. Why not average all states and average that with the federal data?”** Applying compensation techniques, the federal government can only be used as a single data point, since they are one employer. Each state is a single employer and counted as such, and is averaged with the federal data. Even though DOW believes that, “federal wildlife/ecology research scientist positions post the most serious challenges to recruitment and retention issues”, the statutes and compensation principles governing salary surveys precludes selecting only the highest jobs to set salaries, and the complete market must be used. Federal agencies did not report the actual number of employees in their matched classes to allow calculation of the weighted average, and is why midpoints are used to standardize the comparisons for calculation purposes.

- **“The federal government appears to indicate the GS 15 grade is used.”** The division was able to match to the DOW researcher to the federal government researcher positions. The division confirmed the following through federal human resources offices. It is standard to fill federal researcher positions at the GS 11 level with a Master's degree, and at the GS 12 level with a PhD. Researcher positions are usually filled at one grade level higher than the operational biologist positions. The federal government matched the GS 11/12 salary ranges to the General Professional IV, and the GS 13/14 to the General Professional V level. The federal research administrators or some recognized “international” experts are at the GS 15 level. According to US Geological Survey, of the 120 researchers within the Cooperative Research Units around the country, only six are at the GS 15 level.

The federal agencies that have researcher positions must conduct regular peer reviews. The panels meet every four years, and every researcher is reviewed at that time for possible upward or downward movement, or sustainment within the grades. Movement upward is dependant upon the advancement of the overall career of the researcher within the federal system. The US Office of Personnel Management requires the peer review panels to follow the “Research Grade Evaluation Guide”. Demotions occur if the researcher is no longer functioning at the level at which they are currently classified. The peer review panels will only promote those based on the level of recognized expertise, and to what level the individual is nationally and/or internationally recognized. Many of the GS 13/14/15 researchers are required to conduct research activities at the national level, as well as in foreign locations. The federal researchers also have a larger overall programmatic national and/or international impact that could direct local, national or international programs, policies and projects. There is a possibility for non-supervisory researchers to reach the GS 15 level, but it is a very rare occurrence and the career researcher must be a recognized “international” expert in his/her specific field, and be a leader of a large national or international level research program, e.g., approve leave, scheduling, etc. Overall the nature and scope of research being conducted in conjunction with the overall programmatic impact, clearly differentiates the GS 15 federal level positions from those of the state researchers and the GS 15 grade was not used to compare to the state's fully operational researcher.

- **“We should be including the Cooperative Wildlife Research Units which is a federal agency research program within the US Department of Agriculture.”** Colorado has a Cooperative Fish and Wildlife Research Unit located with Colorado State University (CSU). The mission of that unit is as follows. “The U.S. Department of the Interior's Cooperative Research Units Program has a history of collaboration among universities, States, and the Federal Government that is unique among natural resource agencies. Each unit is a partnership among the Biological Resources Division of the U.S. Geological Survey, a State natural resource agency, a host university, and the Wildlife Management Institute. Staffed by federal personnel, Cooperative Research Units conduct research on renewable natural resource questions; *participate in the education of graduate students destined to become natural resource managers and scientists*; provide technical assistance and consultation to parties who have legitimate interests in natural resource issues; *and provide continuing education for natural resource professionals*. Unit research programs are not base funded, but rather are funded by *state*, federal, and non-government agencies to meet their own information needs relating to fish, wildlife, and natural resource management.

Cooperative Research Units have three facets to their mission:

**Education** - Cooperative Unit scientists teach university courses at the graduate level, provide academic guidance to graduate students, and serve on academic committees.

**Research** - Cooperative Unit scientists conduct research that is designed to meet the information needs expressed by unit cooperators.

**Technical Assistance** - Units provide technical assistance and training to state and federal personnel and other natural resource managers. The expertise of the Cooperative Research Unit scientists, cooperating university faculty, and biologists of the cooperating State natural resource agency is made available for this aspect of the mission.”

According to the co-director of the Colorado Cooperative Fish and Wildlife Research Unit located at CSU, “the type of research being conducted at CSU is different from the research being conducted at DOW. The CSU research projects are shorter in duration to support the academic success and completion of their graduate students, and that the majority of the research is conducted by the graduate students. The DOW research projects are longer in duration to support Colorado’s wildlife program.” The Colorado Cooperative Fish and Wildlife Research Unit has four federal employees with the USGS, and confirmed the matches to their researcher positions, which are consistent to the other matched researchers within the federal system.

The state level wildlife research is conducted to support the overall goals and mission of the Colorado Department of Natural Resources, Division of Wildlife. According to DOW, “the mission of the Colorado Division of Wildlife is to perpetuate the wildlife resources of the state and provide people opportunity to enjoy them. The Division of Wildlife manages the state’s 960 wildlife species.

It regulates hunting and fishing activities by issuing licenses and enforcing regulations. The Division also manages more than 230 wildlife areas for public recreating, conducts research to improve wildlife management activities, provides technical assistance to private and other public landowners concerning wildlife and habitat management, and develops programs to protect and recover threatened and endangered species.”

According to the DOW Division Director, the DOW positions that conduct research are within the

Terrestrial Section, and are “...responsible for all of Colorado’s terrestrial wildlife management, research, planning, regulations, harvest/population inventory/analyses and public involvement. This includes avian and mammal species research (including endangered and threatened species), monitoring the health of the state’s terrestrial wildlife, and oversight of the Division’s fixed-wing aircraft and pilots. The unit employs several different occupations, such as terrestrial biologists, wildlife veterinarians, researchers, technicians, program managers and support staff who work in 6 organizational units (including a live animal research facility).”

In reviewing the DOW Terrestrial Section purpose, it does not provide “education of graduate students destined to become natural resource managers and scientists; and provide continuing education for natural resource professionals.” The mission for the Colorado Cooperative Fish and Wildlife Research Unit is to educate graduate students to become trained wildlife biologists, and the mission of the DOW Terrestrial Sections is to support Colorado’s wildlife program. Even though the research being conducted by DOW and the Colorado Cooperative Fish and Wildlife Research Unit is a similar field and the researchers may work together on various research projects, the overall program mission, scope and purpose of the research are different between the two entities. Further, as all federal employees are considered to be part of one employer, the division has already included the federal pay structure values in the overall salary survey data analysis.

**-“The researcher positions are expected to publish work and have the same qualifications as faculty, and thus faculty positions should be surveyed.”** Higher education researcher and faculty positions were not included in the direct survey because they are not similar in scope, nature of research work being conducted, and mission and funding sources, to the identified researcher positions in the state job evaluation system.

The mission for the CSU Department of Fish, Wildlife, and Conservation Biology Department is “for half a century, Colorado State University’s undergraduate and graduate programs in Fish, Wildlife, and Conservation Biology have educated students and the public to be stewards of our nation’s natural resources.” The overall goal is to “offer comprehensive undergraduate and graduate education in fisheries, wildlife, and conservation biology.” The main mission of the faculty is to educate the students and not to conduct research 100%, or even 90% of the time. Even though research is conducted at the university level, it is to support and further the overall education of the students, and to acquire funding for the continuation of the educational program. The overall scope of research being conducted and the mission of the organizational research program distinguish university positions from the state wildlife research program at DOW. Furthermore, the division does not use salary data from another segment of the Colorado executive branch of government, e.g., it does not survey itself.

The qualifications of the state researchers may be the same as those of the federal and university researcher positions, but the state job evaluation system is based upon the scope and nature of the work being conducted, and not by minimum qualifications.

**- “It was stated that the General Professional class series does not adequately represent or fit the function of the wildlife researchers,...wildlife researcher scientists develop new knowledge and theory for a professional field, hence, conduct scientific research.”**

The General Professional class series states that positions within this series make decisions that require the creative and conceptual application of theory and principles of a professional field. The state researchers require the practical application of scientific methodology in conducting their research. A scientific method consists of the collection of data through observation and experimentation and the formulation and testing of hypotheses. Scientific researchers propose hypotheses as explanations of phenomena and design experimental studies to test these hypotheses. In essence, wildlife researchers are not conceptually unique in job evaluation terms to other professionals within the General Profession class series.

Prior to 1987 class relationships existed and classes were related to Professional, Administrative and Technical (PAT) relationships. The PAT relationship was used for professional classes that included wildlife management, wildlife biology, biology, zoology, and other related life biological sciences. There was also the Physical Sciences relationship that conducted work of physical, engineering, or architectural sciences. The wildlife researcher related to the life biological sciences fields within the PAT and not in the Physical Sciences relationship.

In 1987, legislation that changed Colorado's survey methodology and created the occupational groups placed the wildlife researchers into the Professional Services occupational group. At that time, wildlife researchers appealed that decision to the State Personnel Director. Professional Services is defined as occupations performing professional and paraprofessional work concerned with the creative and conceptual application of theoretical and practical aspects of such fields as life sciences, social sciences, public relations and writing, library and museum sciences, computer sciences, law, art and entertainment, business, etc., with decision making related to subject matter, duties, and consequence of action. Necessary knowledge is generally gained through completion of a specific degree, specialized on-the-job training in addition to the college degree, or equivalent specialized experience.

The Director at that time determined that these classes belong in the Professional Services occupational group because they are predominantly involved in life science occupational fields related to wildlife management and therefore do not align with the Physical Science and Engineering occupational group. The Physical Science and Engineering occupational group is used for positions of the same general nature except the occupations are in the physical engineering or architectural sciences.

In 1998, the Professional Services consolidation system maintenance study moved Life/Social Science Research/Scientists (LSSR) into the General Professional class series. This decision was also appealed based primarily on specialized training and advanced degrees. The Director at that time upheld the study decision and found that the consolidation was not arbitrary, capricious or contrary to rule or law. Upon further appeal, the district court upheld the Director's changes to the class codes and class titles and that employee's could not prove "any actual impact suffered", thus the case was dismissed.

**-The state Physical Science Researcher/Scientist class series more accurately describes the functions of DOW biological research scientists and is a classification series that would serve as an appropriate model for biological research scientists."**

The Physical Science Researcher/Scientist class series description does describe similar professional

level concepts, but salary survey data shows that physical sciences are not compensated at the same level as the life sciences, such as biology and ecology. The division's direct salary survey asked this exact question and the majority of the states indicated that they continue to compensate physical scientists/researchers differently from wildlife biology/ecology researchers. Even though the physical science positions conduct research, the market salary data clearly distinguishes between the physical sciences and the researchers in this study.

**-“The turnover data must be wrong and the researchers should be compared to turnover with the federal system, not to the Professional Services Occupational Group.”**

As is standard practice for any employer, turnover is defined as separation from state employment. It excludes transfer and promotions because employees remain within state government. Often times a certain amount of turnover is a realistic expectation for any organization and considered healthy. Employers focus on solutions to address unhealthy or problematic levels of turnover as well as planning for impending retirements through succession planning.

Upon collection and review of the turnover data for the wildlife researcher positions, it was determined that the overall 3-year average is an 11% turnover rate, which is in line with the overall average 3-year turnover rate of 10.1% for the entire Professional Services occupational group. It is generally unwise to directly compare turnover rates with other employers, as each employer's economic or budget situation, business plan, and organizational goals may be completely different. It is the division's practice to compare turnover rates with comparable positions within the state system, or to overall occupational group or state average turnover rates. Other employers' or average market turnover rates are used to identify trends and for generic comparison purposes only.

The DNR HR Director indicated that the overall turnover rate at DOW is at 8%. At the meet and confer on July 2, 2008, it was stated that DOW researchers are used to 0% turnover, so in essence an 11% turnover rate is considered a large problem, even though the majority of the vacancies were from retirements and subsequent promotions. Generally speaking, an expectation of 0% turnover is unrealistic. The division recommends that DNR and DOW investigate and address turnover internally within the department/division.

## **Summary**

The division used technically and professionally sound survey methodologies to assess prevailing total compensation practices, levels and costs, as well as the systematic approach and technically sound evaluation and analysis to objectively determine class and uniform alignment of classes and occupational groups, and assignment of proper pay grades. Staff considered all feedback, information, and data available in analyzing class structure levels and pay grades for the researcher positions in the state system.

The available salary survey data clearly demonstrates that other organizations with comparable researcher positions are compensating their wildlife biology/ecology, health/social, and other life science researchers at a comparable level to the state. It also appears that the General Professional III is the appropriate class for fully operational researchers. The market also shows that physical science

researchers are compensated and allocated differently from the life sciences researchers and that these positions have always been differentiated from each other within the Colorado job evaluation system, which also reflects the current market data accordingly.

This system maintenance study demonstrates that the state researchers are not similar to the GS 15 level federal or university researchers. Researchers identified from these two entities are differentiated by the frequency, scope and nature of research being conducted and the overall organizational mission for which the research is being conducted to support. The minimum requirements in the state, federal and university researchers may be the same, but classification and compensation is not based on the qualifications of a person within a position. The duties of a position define the position within the state job evaluation system, and not the minimum qualifications. Therefore, this study results in no changes to pay grades or class descriptions and the biology/ecology and life or social science researcher positions are to remain within the General Professional class series.

## **FISCAL IMPACT FOR IMPLEMENTATION YEAR**

There is no fiscal impact resulting from this system maintenance study, as no changes to class or grade are recommended.

## **RECOMMENDATIONS**

### **I. Occupational Group**

No change is recommended. These positions are to remain in the General Professional class series, within the Professional Services occupational group.

### **II. Class Descriptions**

There are no changes to the class descriptions other than the Class History section to show that this study was conducted.

### **III. Class Conversion and/or Placement**

There is no class conversion or class placement as a result of this study.